

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015078**Date Inspected:** 22-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:** **Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:** **Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:** **Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:** **Yes No N/A****Delayed / Cancelled:** **Yes No N/A****Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 11AE (Green Tag DCP)

This QA Inspector performed Green Tag DCP along with Mr. Chandra for the Segment 11AE from Panel Point (PP) 94.75 to PP 97.75.

Plumbness and Flatness measurement for Deck Panel to Deck Panel Diaphragm at PP 95, PP 96 and PP 97 from East and West Side of the Diaphragm.

Flatness measurement for Floor Beam at PP 95, PP 96 and PP 97 Cross Beam and Counter Weight Side.

Skin Flatness for Side Panel to Corner Assembly Bike Path Side and Cross Beam side from PP 94.75 to PP 97.75.

Skin Flatness for Deck Panel to Corner Assembly Bike Path Side and Cross Beam side from PP 94.75 to PP 97.75.

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

The measured readings were recorded on Dimension Control Forms and submitted to the Task Leader and Engineer for review.

### Segment 7DE (FL3 to Bottom Plate)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting FL3 flange to the Bottom Plate at Panel Point (PP) 56, PP 57 and PP 58 for Segment 7DE. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00396 Dated March 22, 2010.

Bolt sizes used were M24 x 60 RC Set# DHGM240014 and final torque required was 567 N-m,

Bolt sizes used were M24 x 65 RC Set# DHGM240013 and final torque required was 540 N-m

Manual Torque wrench was been used with Sr. No. XO2-747.

### Segment 7DE (FL3 to Bottom Plate)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Bottom Panel to the Bottom Plate at Panel Point (PP) 56, PP 57 and PP 58 for Segment 7DE. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00398 Dated March 22, 2010.

Bolt sizes used were M24 x 70 RC Set# DHGM240075 and final torque required was 1480 N-m

Manual Torque wrench was been used with Sr. No. XO2-747.

### Segment 11AE (Cope Holes)

This QA Inspector performed Dimension Control Inspection for the Floor Beam to Bottom Panel Cope Holes and Floor Beam to Side Panel Cope Hole at Work Point E4 and E3 at Panel Point (PP) 95, PP 96 and PP 97 for Segment 11AE the Inspection was performed against the ABF Inspection Report No. CWAHIR-11AE-01 Dated June 21, 2010. The measured readings were recorded in the Dimension Control Form (DCP) and submitted to the Task Leader and Engineer for review. Please refer the pictures attached for more comprehensive details.

### Suspender Bracket (At Bay # 19)

This QA Inspector performed Dimension Control Inspection for the Suspender Bracket Lifting Rod Hole Spacing by placing the Socket (Template). Inspection performed jointly along with ABF Survey Team for the following mentioned Suspender Bracket at Bay # 19.

SB48E

SB48W

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

SB66W

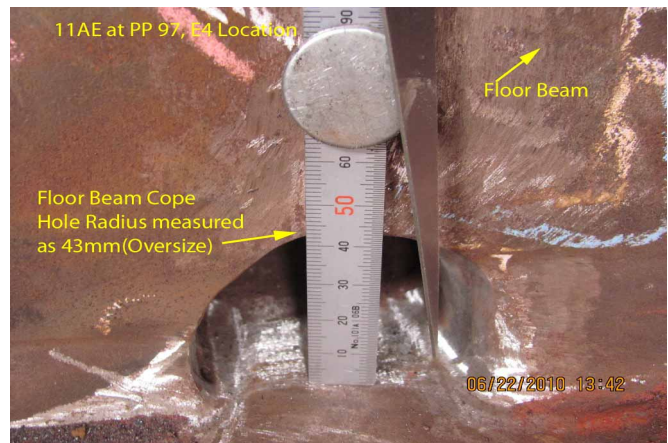
SB70W

SB54W

SB50W

The measured readings were recorded in the Dimension Control Form (DCP) and submitted to the Caltrans Engineer for review.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Math,Manjunath

Quality Assurance Inspector

**Reviewed By:** Carreon,Albert

QA Reviewer

---